BRUHAT BANAGLORE MAHANAGARA PALIKE

Exceecutive Engineer Yelahanka Division

Detailed Estimate

Name of Work: Provoiding Drinking Water Supply in Ward NO-02 of Yelahanka Sub Division.

Job Code; **Estimate Amount : 5000000.00**

Sl. No	Description of Work	No	Dimension			Quantity	Unit	Rate	Amount
			L in M	B in M	D in M			in Rs.	in Rs.
	BOREWELL								
1	Sinking Borewell of 165mm dia clear, using fast rig in all strata including over-burden upto 20mts. Fixing of casing Pipes, collars and cap with necessary cutting and threading including, transportation of Rig and supporting vehicle, crew charge and cost of consumbles, etc, complete including yield testing at the final depth with a minimum woring of compressor for one hour. (excluding cost of casing pipes, collars and cap, etc.)								
	a) 0.00 to50.00 Mtr	1	50.00			50.00	Rmtr	315.18	15,759.00
	b) 50.00 to 100.00 Mtr	1	50.00			50.00	Rmtr	412.00	20,600.00
	c) 100.00 to 150.00 Mtr	1	50.00			50.00	Rmtr	458.00	22,900.00
	d) 150.00 to 200.00 Mtr	1	50.00			50.00	Rmtr	484.00	24,200.00
	e) 200.00 to 250.00 Mtr	1	50.00			50.00	Rmtr	560.32	28,016.00
	e) 250.00 to 300.00 Mtr	1	50.00			50.00	Rmtr	600.49	30,024.50
2	Supply of ISI Mark 175mm nominal Bore, Plain end steel casing Pipe-grade of steel Fee 4100 of wakk thickness 504mm thick confirming to IS 4270:2001 and latest amendments, electric resistance welded steel electric or basic oxygen process in fandom length of 5 to 7mtr. Both ends threaded confirming to Is554/1985 one end fixed with socket confirming to IS 270:2001 and other end with screwed pipes. All pipes shall be reasonably free from defectes. The tubes shall be resonably straigth should be with ISI Marking Weighting 25.10 kg/mtr (Inclusive of all taxes and durties) Prices include Collar - medium duty. Page No.ii, I.No.53 PRE Bang SR 2012-15								
		1	25.00			25.00	Rmtr	1325.00	33,125.00
	a) Above 20mtrs and upto 30mtrs.@15%	1	25.00			25.00	Rmtr	45.90	1,147.50
	b) Above 30mtrs@30%	1	25.00			25.00	Rmtr	91.80	2,295.00
3	175mm M.S. B-Class Casing Collar (P No.ii,I.No.55)								
		5				5.00	Nos	150.00	750.00
4	175mm dia Casing Cap (P.No.ii,I.No.54)								
		1				1.00	Nos	100.00	100.00
5	Supply and delivery at site brand new submesible PUMPSET suitable for bore well of 150 mm dia and having declared duty conditions as detailed below and satisfying performances characteristics for pump and motor as declared by bureau of Indian standards. The pump should confirm to IS:8034-1970 (with all its latest amendments) and should bear the ISI mark 12.5 HP 20 stage (CRI Pumps) SR 2013-14 page xxxxII sl no 23)								
	H=150m dish 150 LPM	1				1	Set	60084.36	60,084.36
6	Supply and Delivery of Galvanized Mild steel Heavy Class (C-Class) conforming to IS 1239-1979 PART-I/1979 with lastest amendments with ISI mark (one end fitted with ISI mark heavy duty collar and other end fitted with Protective cover) 50 mm dia								
	50mm dia G.I Pipe with heavy duty	1	300.00			290.00	Mtr	375.00	108750.00
7	submersible Cable. Supply and Delivery of brand new best make PVC insulated cable of flat 3core (sheathed) of nominal cross sectional area containing to IS 894-1997 with latest amendments (as per SPD) 4 Square mm								
	280*2+10	1	590.00			590.00	Mtr	81.00	47,790.00
8	50 mm dia GI Collar Heavy duty								
		1	50.00			50.00	Mtr	130.00	6,500.00
9	Meter and Panel Board: Supply and Delivery of Meter and Panel Board: Meter Board unit one number of MS Box of size 300x120 mm size fabricated out of 2mm thick sheet metal with sealable door arrangement for munting the CTS (if any) cutouts 3phase dia 4 wire energy meter and cable box complete. A transparent glass piece should be provided where the energy meter reading could be read. Panel Board: One number of cubicle type of control panel board to operate on 50c/400/400v Upto 10 to 20 HP								

Sl. No	Description of Work	No	Dimension			Quantity	Unit	Rate in Rs.	Amount in Rs.
			L in M	B in M	D in M				
		1				1.00	Nos	11000.00	11,000.00
10	50mm dia G.I.N.R. Valve								
		1				1.00	Nos	856.00	856.00
11	Erection & Commissioning of work of pumpset including aligning and balancing with all necessary erection of materials and labour including supply and erection of two pair of supporting clamps, one borewell cap, cable clips and water tight gland cable protectors, bolts nuts valves and gauges etc, all job including fixing sluice valve, non return valve etc, and connecting delivery side of pumpset to rising main etc, complete.								
		1				1.00	Nos	850.00	850.00
12	Power Capacitor: Supply and Delivery of brand new best make capacitor conforming to IS:2834-1986 with latest amendments with ISI mark of required capacity tested and approved by KPTCL anthorities and erection, electrification and commissioning of the same at the location of the respective pumpsets. Supply & Delivery of best indigenous brand new MCB (Minature Circutit Breaker) of required capacity as per IS:8828-1978 and its latest amendment with ISI mark 6/10/20/25/40 amps with sealble box with MCB 3 KVAR								
		1				1.00	Mtr	460.00	460.00
13	Supplyin mmdia 2mm 2.5mm thick heavy gauge PVC conduit pipe with suitable size bends, metal/PVC junction boxes adhesive pase etc., and running before cocreting the slab. The conduit should be tiled to the reinforcement rods by using binding wires and unused ways of junction boxes and plpe ends should be covered using PVC end enclosuers. Run with 18SWGGI fish wire wherever necessary (P-2,1-1)								
	b)25mm dia 2mm thick	1	10.00			10.00	Nos	44.28	442.80
14	Supplying of TPST with rewirable porcelain channels in SM enclosure. (P-30. 1-1)								
	b)32amps	1				2.00	Nos	1468.80	2,937.60
15	Supplying and fixing polished wood board made of not less than 15 mm thick plan on both sides with planks made out of more than two pieces and fixing the same to the wall using wooden plugs, screws etc.,(p-30 1-2)								
	20X20X2 5	2				2.00	Nos	307.80	615.60
16	Supplying and wiring adopting loop system in existing PVC Conduit/casing caping using Copper PVC insulated multistrand 2x1.5 Sqmm copper wire with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet/gang box. The other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet (P-3. 1-8)								
	(a) Short Point upto 3Mtr form tapping point to outet via switch	1	5.00			5.00	Rmtr	189.00	945.00
	© Long Point above 6 Mtr. Upto 10 Mtr. From tapping point to out let via switch	1	5.00			5.00	Rmtr	397.40	1,987.00
17	Supplying 6 A flush/projected type socket and a 6Amps flush/projected type SP switch either surface/flush mounting in a existing gang box or a 4mm thick plastic sheet and fixing over a flush mounted wooden box and wiring using necessary capacity wires as required (P-6., 1-12)								
	fb)6Amps3/5 Way	1				1.00	Nos	114.48	114.48
18	Wiring for lighting /power circuit using one of PVC insulated 1100V grade multis and Copper conductor single core cable in open or concealed system of wiring (P-9, 1-20)								
	Group "B"© 2.5Sq mm	1	25.00			25.00	Rmtr	22.65	566.25
19	Supplying and fixing PBBC backelite straight or slant batten holder &wiring 60w/230 Volts lamps (P-13, 1-2)								
	Group B	1	5.00			5.00	Rmtr.	60.48	302.40
20	Supplying and fixing of LED type panel borad indicating lamp with required colour suitable for 220 v A.C. 50 Hz 12/24v D.C (P-38, 1-35)								
		3				6.00	Nos	464.40	2,786.40

Sl. No	Description of Work	No	Dimension			Quantity	Unit	Rate	Amount
			L in M	B in M	D in M			in Rs.	in Rs.
21	Supplying of LT UG cable having aluminium conductor PVC insulated. Sheathed. Galvanished. Steel wire/steel tape armoured cable with PVC outer sheathing 1.1KV class (conforming to IS 1554) Class-A (P-67, 1-10)								
	e)4.0 core 16Sqmm	1	12.00			12.00	Rmtr	162.00	1,944.00
22	Lobour charges for laying of 1.1KV class UG cable when supplied departmentally/ agency in existing trench GI pipe/stoneware pipe/on wall/on pole as required (P-68, 1-11)								
	a)10Sqmm to 16Sqmm	1	15.00			15.00	Rmtr	8.64	129.60
23	Digging of trench of 0.6mtrs deepx0.5 mtrs wide refilling the required gorund level and consolidating etc., complete (P-68, 1-12)								
	a)in soil(ordinary)	1	15.00			15.00	Rmtr	43.20	648.00
24	Supplying and fixing of class 'A' GI pipe on pole /wall/drain crossing with necessary clamping arrangement for UG cable of 1.1KV class(P-69, 1-15)								
	a)65mm(upto 150Sqmm)	1	15.00			15.00	Rmtr	259.20	3,888.00
25	Supplying and fixing of heay duty cable glands suitable for UG cable of 1.1KV class metal only (P-69, 1-17)								
	a)25mm dia	1				1.00	Nos	71.28	71.28
26	Supplying and fixing miniature circuit breakers on existing MCB disitribution boards using necessary fixing materials and wiring complete as required (P-34, 1-13)								
	5-32 amps TPN	1				2.00	Nos	1085.40	2,170.80
27	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers etc., complete (P-30, 1-3) a) 32Amps								
		6				6.00	Nos	108.00	648.00
28	Supplying and fixing L.T. cast lorn pot heads suitable for 1.1. KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.,(P-69, 1-16) a) 16Samm								
		1				1.00	Nos	280.60	280.60
29	Supplying, fixing, wiring, earth electrode for gounding conduits, I C cotouts and other equipments on the meter board using 40mm dia 2.90 thick GI pipe 2.5 mtr long buried in a pit... The pit should be filled with equal proprotion of salt and charcoal 150mm alround the pipe to complete depth. The connection from the to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3 of IS 732 using 12mm dia bolts, nuts, washers and checkunts etc., the pipe shall have 16 through holes of 122mm dia (P-66, 1-7)								
		2				2.00	Nos	2106.6	4,213.20
30	Supplying decorative horizontal type street light fluorescent fitting weather and water proof complete with low loss open construction copper wound ferromagnetic ballast,starter,locking type brass contact holders with 1 No. of 4 feet 40 watts fluorescent tube completely wired for use on 230/250 volts. 50cycles AC supply with opal reeded Perspex cover at bottom complete fitting (P-17, 1-6)								
		1				2.00	Nos	1544.4	3,088.80
31	Supplying & fixing mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluroscent tube street light fitting of all capacities of GI or CI or rail or RCC pole/ wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires complete(P-26, 1-1)								
		1				2.00	Nos	658.80	1,317.60
	For one (1) Borewell								444305.00
	For six (6) Borewell								2665830.00
	Pipeline								
32	KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (Page No 143., I.No.19.1 of KPWD S.R 2018-19).								
		Cum							
	Rate analysis								
	Basic rate	130.00							
	Lead upto 5km (2*1.28*5+57)	69.80							

Sl. No	Description of Work	No	Dimension			Quantity	Unit	Rate in Rs.	Amount in Rs.
			L in M	B in M	D in M				
	Area weightage 6%	7.80							
	Total	207.60							
	Pipeline	1	2390.00	0.60	0.90	1290.60			
						1290.60	**Cum**	**207.60**	**267928.56**
33	KSRB 2-4 : Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications. (P.No. 7, I.No. 2.11 of KPWD S.R 2018-19).								
		Cum							
	Rate analysis								
	Basic Rate	121.00							
	Area Wtg 6%	7.26							
	Total	128.26							
	Pipeline	1	2390.00	0.60	0.35	501.90			
						501.90	**Cum**	**128.26**	**64373.69**
34	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete. (internal work exposed on wall) - 50mm nominal OD pipes. (P.No. 98, I.No. 13.85.6 of KPWD S.R 2018-19).								
		Mtr							
	Rate analysis								
	Basic Rate	465.00							
	Area Wtg 6%	27.90							
	Total	492.90							
	For pipe line	1	2390.00			2390.00			
						2390.00	**Mtr**	**27.90**	**66681.00**
35	Gun metal non return valve 65mm nominal bore vertical type (PWD SR 2018-19,Page no. XXV ,Sl.no.649, code no.0128)								
		Cum							
	Rate analysis								
	Basic Rate	1271.19							
	Area Wtg 6%	76.27							
	Total	1347.46							
	For pipe line		40.00			**40.00**	**Nos**	**1347.46**	**53,898.46**
36	KSRB 2.6 : Providing and filling sand in foundation to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications. specification. No. KBS 2.10.2 (P.No.7, I.No.2.13 of KPWD S.R 2018-19).								
		Cum							
	Rate analysis								
	Basic Rate	2060.00							
	Area Wtg 6%	123.60							
	Total	2183.60							
	For pipe line	1	2390.00	0.60	0.20	286.80			
						286.80	**Cum**	**2183.60**	**626256.48**
37	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (P.No.155, I.No.20.18 of KPWD S.R 2018-19).								
		Cum							
	Rate analysis								
	Basic Rate	1888.00							
	Area Wtg 6%	113.28							
	Total	2001.28							
	For pipe line	1	2390.00	0.60	0.250	358.50			
						358.50	**Cum**	**2001.28**	**717458.88**
36								**Sub total**	**4462428.00**
###								**Add 12% GST Charges**	**535492.00**

Sl. No	Description of Work	No	Dimension			Quantity	Unit	Rate	Amount
###			L in M	B in M	D in M			in Rs.	in Rs.
								Miscellaneous and Rounding off	2080.00
								Grand Total	5000000.00

Certificate:-

1. That the workspot inspected by me and found work is necessary.
2. That the area comes with in the Bruhat Bangalore Mahanagara Palike Limits.
3. That the rates are adopted based on the PWD SR of 2018-19 (Issue rate as on 01/01/2018)
4. That the provisions made in the estimate are necessary and quite essential.

Assistant Engineer
Ward no 02
BBMP, Bangalore.

Assistant Executive Engineer
Yalahanka Sub-division
BBMP, Bangalore.

Executive Engineer
Yelahanka division
BBMP, Bangalore.

Administrative Approval
Accorded For Rs 50.00 lakhs only
Head of A/C P3293
CER NO : 105/18-19 08.01.2019
TA ACE (YNK)

Technical Sanction
Accorded For Rs 50.00 lakhs only
Head of A/C P3293
CER NO : 194/18-19 08.01.2019
TA ACE (YNK)